

## **Kinetic determination of selenium using the reduction of Nile Blue with sulfide ions**

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### **Abstract**

The catalytic effect of Se(IV) was first observed in the reaction of the reduction of Nile Blue with sulfide ions. Optimal conditions for the determination of selenium by this reaction were found. The dependence of the reaction rate on the concentration of Se(IV) was linear in the concentration range 0.008-0.16 µg/mL. Solvent extraction with dithiophosphoric acids was proposed for the separation of selenium from the interferents. A procedure for the extraction-kinetic determination of selenium with the detection limit 0.006 µg/mL was developed.

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